

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* STEVE LIN

---

Appeal 2006-1531  
Application 10/645,226  
Technology Center 3700

---

Decided: November 13, 2006

---

Before WARREN, KRATZ, and TIMM, *Administrative Patent Judges*.  
KRATZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal from the Examiner's final rejection of claims 1 through 6 and 8, the only claims that remain pending in this application. We have jurisdiction pursuant to 35 U.S.C. § 134.

Appellant's invention is concerned with fluid-tight vials useful for storing and shipping pre-made sterile biological assay fluids (Specification 1-2). Appealed claim 1 is illustrative and reproduced below:

1. A fluid-tight vial comprising:

- (a) a substantially cylindrical container with an open end having a circumferential lip, a circumferential flange integral with said circumferential lip, a screw thread and a ratchet-toothed ring proximal to said open end; and
- (b) a cap adapted to engage said container's open end in fluid-tight fashion, said cap comprising a circumferential skirt, a hinge, a frangible strip and a flip-top, wherein the inner portion of said skirt has a screw thread capable of matingly engaging said screw thread of said open end of said container and a ratchet-toothed ring capable of lockingly engaging said ratchet-toothed ring of said open end of said container when said cap is threaded onto said container

wherein said flip-top has an inner circumferential recess capable of non-threadedly engaging said circumferential flange to form a fluid-tight seal between said flange and said recess.

The Examiner relies on the following prior art references as evidence in rejecting the appealed claims:

Davis	US 3,991,904	Nov. 16, 1976
Ostrowsky	US 4,487,324	Dec. 11, 1984
Farris	US 5,101,870	Apr. 07, 1992

Claims 1-6 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Davis in view of Ostrowsky and Farris.

### OPINION

Upon review of the opposing arguments and evidence advanced by the Examiner in the Answer and Appellant in the Briefs in support of their respective positions, we conclude that the Examiner has not established a prima facie case of obviousness for the claimed subject matter.

Accordingly, we will not sustain the Examiner's § 103 rejection for reasons set forth in Appellant's Briefs and as further discussed below.

Under 35 U.S.C. § 103(a), the Examiner carries the initial burden of establishing a prima facie case of obviousness. *In re Piasecki*, 745 F.2d 1468, 1471-72, 223 USPQ 785, 787-88 (Fed. Cir. 1984). As part of meeting this initial burden, the Examiner must determine whether the differences between the subject matter of the claims and the prior art “are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art” (emphasis added). 35 U.S.C. § 103(a) (1999); *Graham v. John Deere Co.*, 383 U.S. 1, 14, 148 USPQ 459, 465 (1966). The applied prior art references as a whole must be viewed from the perspective of one of ordinary skill in the art to determine whether “some suggestion” is present to arrive at the claimed subject matter. *Cf. In re Mills*, 470 F.2d 649, 651, 176 USPQ 196, 198 (CCPA 1972).

Claim 1, the sole independent claim before us on appeal, requires a fluid-tight vial including a substantially cylindrical container and a cap. Claim 1 requires a cylindrical container including an open end with an integral flange and lip, which features are circumferentially arranged about

the cylindrical container opening. A screw thread and a ratchet-toothed ring are required to be located proximal to the open container end. Also, claim 1 requires that the cap includes a circumferential skirt, a hinge, a frangible strip and a flip-top. The inner portion of the cap skirt, as claimed, includes a screw thread and a ratchet-toothed ring. The latter skirt components are required to be arranged for engaging the aforementioned screw thread and ratchet toothed ring of the container in a fashion such that when the cap is threaded onto the container, via the mating screw threads, the ratchet-toothed rings engage each other in a locking fashion. In this regard, claim 1 requires that the cap is engaged with the open end of the container in a fluid-tight manner.

The Examiner acknowledges that Davis does not disclose several features required by all of the rejected claims on appeal. In particular, the Examiner acknowledges that Davis does not disclose a cylindrical container, much less a cylindrical container with screw threads and a ratchet toothed ring as claimed (Final Office Action 2-3).<sup>1</sup> Nor has the Examiner maintained that Davis teaches or suggests employing a cap skirt with an inner portion thereof furnished with screw threads and having a ratchet toothed ring as here claimed.

In this regard, we note that Davis is concerned with providing a redesigned plastic container and closure assembly that addressed problems with prior art captive cap closures designed for use with plastic containers. Those problems include: (1) closure difficulties due to a prior art design of a prong be caught at the mouth of the plastic container during closure

---

<sup>1</sup> We note that the Examiner did not reproduce the statement of the rejection in the Answer. *See Manual Of Patent Examining Procedure* § 1207.02.

allegedly due to a molding manufacturing step; (2) a related problem with an anchor band riding up the bottle neck during closure of the cap on the container; (3) a leakage problem; (4) molding problems resulting from complicated neck profile designs used in efforts to overcome the aforementioned problems; and (5) bung deformation adjacent to the prong that rendered an integral sealing bond ineffective (Davis col. 1, l. 42 – col. 2, l. 21).

Davis teaches an intricate plastic container neck and closure assembly design to address the above-noted problems. Davis provides a container neck profile that includes:

a main external bead and an auxiliary external bead for co-operation with a modified anchor band with an internal profile for engagement with the beads. In addition, a primary internal sealing bead is provided remote from the mouth of the container and its accuracy is more easily controlled.

Davis at col. 2, ll. 26-32.

Specifically, Davis teaches that:

As shown in **FIG. 3** the closure has a cap-retaining and sealing internal projection **36** to fit under the snap-over bead **1** to hold the cap part in place. The closure also has a first internal main projection **6** on the anchor band to fit under the main band retaining bead **2** and a second auxiliary projection **7** on the anchor band to fit under the auxiliary bead **3**. Reference to **Fig. 3** will show that the mouth or upper edge of the container really plays no part in the sealing effected by the closure.

Davis at col. 4, ll. 26-35.

According to the Examiner:

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the connection between the bottle and closure cap of Davis '904, providing engaging threads and ratchet teeth to a container neck and closure cap, as taught by Ostrowsky'324 to be a mechanical equivalent to a snap-connection.

....

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the container shape of Davis'904, forming it to a cylindrical shape, because Farris '870 teaches varying the shape of the container is well-known, within ordinary skill, and lacks an unexpected result. Furthermore, it would have been obvious to form the container of Davis '904 to a cylindrical shape, or any other desirable shape, because a change in form or shape is generally recognized as being within the level of ordinary skill in the art, absent any showing of unexpected results. *In re Dailey et al.*, 149 USPQ 47. One having ordinary skill would be motivated to form the container at least in view of the teaching of varying container shape in Farris '870.

Final Office Action at pp. 2-3.

In the present case, we determine that the Examiner has not carried the burden of establishing a prima facie case of obviousness. In this regard, the Examiner has not satisfactorily explained why one of ordinary skill in the art would have selected the engaging thread and ratchet teeth features of Ostrowsky and/or a substantially cylindrical shape for the container for use in combination or substitution for the specific container neck and closure device features of Davis. In this regard, Davis teaches the container neck features thereof address problems with prior art closure devices and the Examiner has not presented a persuasive and detailed explanation regarding how the proposed substitutions would be effected such that they would not

adversely effect the desire of Davis to furnish a container and closure with a sealing position removed from the mouth of the container. *See Ex parte Hartmann*, 186 USPQ 366, 367 (Bd. App. 1974).

Moreover, we note that Ostrowsky is directed to a disparate closure structure from that of Davis. The closure structure of Ostrowsky, unlike the closure device of Davis, includes an upper deck that defines a discharge orifice for the container. A cover portion of the closure structure of Ostrowsky includes a sealing post that cooperates with the upper deck opening to seal the container. The Examiner has not fairly explained how the combination of Ostrowsky and Davis would suggest the here claimed cylindrical container and closure device structure including a flip-top inner circumferential recess capable of forming a fluid tight seal with a cylindrical container mouth lip flange together with ratchet teeth and engaging threads arranged as claimed. In this regard, Davis teaches that the sealing position for the container is removed from the location of the container mouth, as noted above.

Rejections based on § 103(a) must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. *See In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. *See, e.g., Grain Processing Corp. v. American Maize-Products Co.*, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

From our perspective, the Examiner's rejection appears to be premised on impermissible hindsight reasoning. On the record of this

appeal, it is our view that the Examiner has not carried the burden of establishing a prima facie case of obviousness with respect to the subject matter defined by the appealed claims.

### CONCLUSION

The decision of the Examiner to reject claims 1-6 and 8 under 35 U.S.C. § 103(a) as being unpatentable over Davis in view of Ostrowsky and Farris is reversed.

REVERSED

tf

CHERNOFF, VILHAUER, MCCLUNG  
& STENZEL  
1600 ODS TOWER  
601 SW SECOND AVENUE  
PORTLAND, OR 97204-3157